L 62616-65 EWI(m) RM

ACCESSION NR: AP5018243 UR/0078/65/010/007/1528/1533
546.28'11 + 546.19'11

AUTHOR: Devyatykh, G. G.; Kedyarkin, V. M.; Zorin, A. D.

TITLE: Kinetics of the thermal decomposition of monosilane, arsine, and monosilane with an admixture of arsine

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 7, 1965, 1528-1533

TOPIC TAGS: monosilane, arsine, thermal decomposition

ABSTRACT: The kinetics of thermal decomposition of monosilane were studied between 208 and 461C. The reaction was found to be homogeneous, first-order, and to have an induction period. The activation energy E = 56.1 kcal/mole, and during the induction period, 61 kcal/mole. The latter high value led to the conclusion that the induction period is due to the generation of crystallization centers in the volume of the reaction vessel. The kinetics of decomposition of arsine were studied in a vessel whose walls were coated with silicon; the thermal decomposition followed a first-order reaction and had an activation energy E = 50.9 kcal/mole. The thermal decomposition of monosilane containing 0.983 vol. %

Card 1/2

L 62616-65
ACCESSION NR: AP5018243

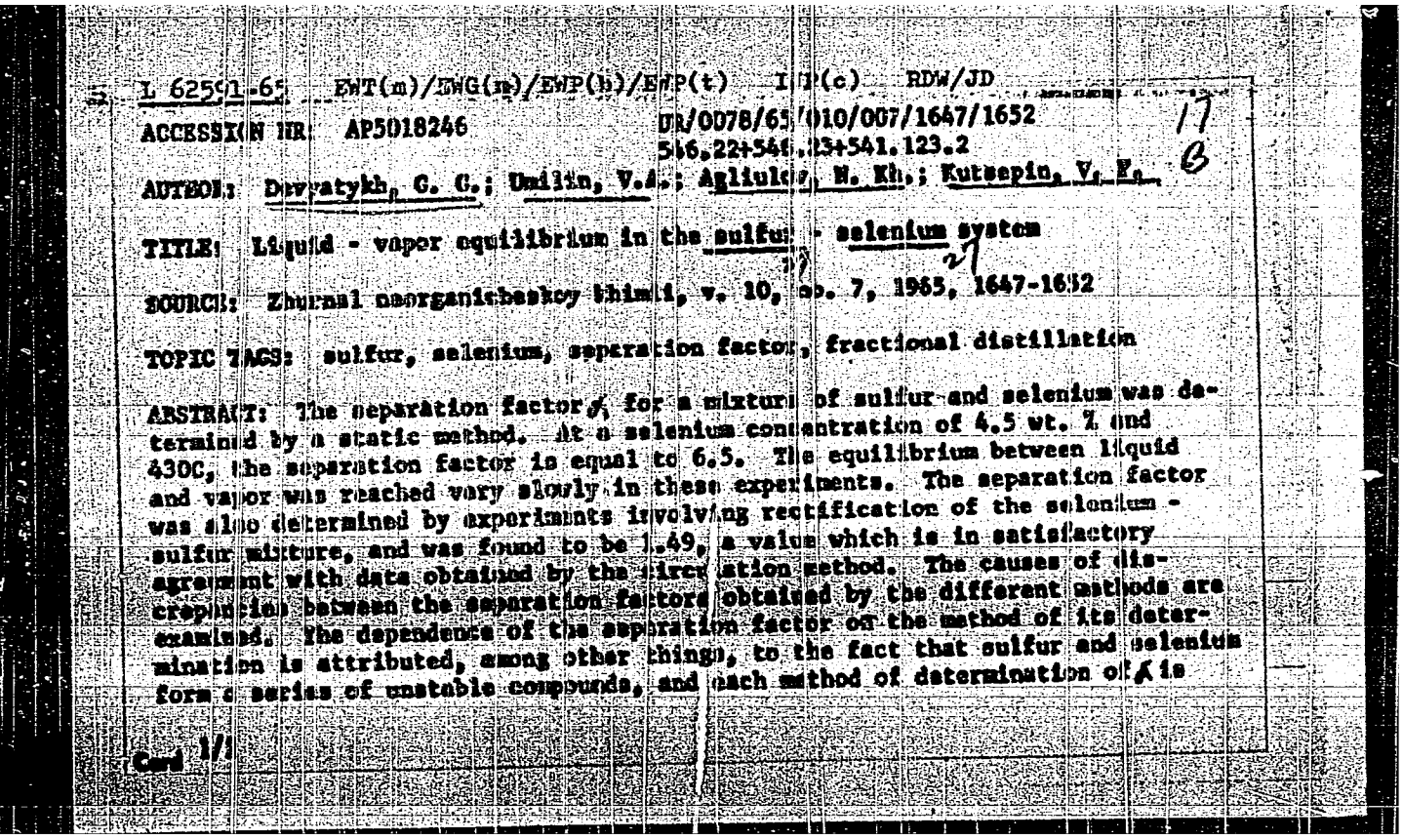
arsine was then investigated at 366C; the decomposition rate of monosilane and arsine was higher than when the pure substances were decomposed separately, but the reaction order was the same. "In conclusion, we express our deep appreciation to N. A. Martynova for her participation in the experimental work and to Ye. A. Rozanova for analyzing the structure of the films." Orig. art. has: 3 figures, 3 tables, and 2 formulas.

ASSOCIATION: Gor'kovskiy gosudarstvennyy universitet im. N. I. Lobachevskogo (Gor'kiy State University)

SUBMITTED: 13Oct63 ENCL: 00 SUB CODE: IC

NO REF SOV: 002 OTHER: 010

Card 2/2



L 6255[illegible]-65 EWT(m)/EWG(m)/EWP(b)/EWP(t) IJP(c) RDW/JD

ACCESSION NR: AP5018246 UR/0078/65/010/007/1647/1652

546.22+546.13+541.123.2

AUTHOR: Devyatykh, G. G.; Umilin, V. A.; Agliulov, N. Kh.; Kutsepin, V. Ya.

TITLE: Liquid - vapor equilibrium in the sulfur - selenium system

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 7, 1965, 1647-1652

TOPIC TAGS: sulfur, selenium, separation factor, fractional distillation

ABSTRACT: The separation factor α for a mixture of sulfur and selenium was determined by a static method. At a selenium concentration of 4.5 wt. % and 430C, the separation factor is equal to 6.5. The equilibrium between liquid and vapor was reached very slowly in these experiments. The separation factor was also determined by experiments involving rectification of the selenium - sulfur mixture, and was found to be 1.49, a value which is in satisfactory agreement with data obtained by the sublimation method. The causes of discrepancies between the separation factors obtained by the different methods are examined. The dependence of the separation factor on the method of its determination is attributed, among other things, to the fact that sulfur and selenium form a series of unstable compounds, and each method of determination of α is

Card 1/1

L 6251-65

ACCESSION NR: AP5018246

carried out under different conditions of formation and decomposition of these compounds. Furthermore, the factor α is determined by two opposite processes: association in the liquid, and dissociation in the vapor; hence, the value of α is affected by the vaporization rate, vapor temperature, relative amounts of liquid and vapor, etc. Thus, different methods produce different results. Orig. art. has: 3 figures, 3 tables, and 4 formulas.

ASSOCIATION: None

SUBMITTED: 05Feb64 ENCL: 00 SUB CODE: IC

NO REF SOV: 012 OTHER: 001

Card 2/2

DEVYATYKH, G.G., VLASOV, S.N.

Calculation of relative vapor pressure of some hydrides over diluted solutions by a statistical method. Zhur. fiz. khim. 29 no.5:1171-1175 My '55. (MLRA 18:8)

1. Gor'kovskiy gosudarstvennyy universitet imeni N.I. Lobachevskogo.

L 41365-66 EWT(m)/EWP(j) WW/RM

ACC NR: AP6022888 SOURCE CODE: UR/0078/66/011/004/0708/0713

52
51
B

AUTHOR: Devyatykh, G. G.; Frolov, I. A.

ORG: none

TITLE: Kinetics of thermal decomposition of monogermane

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 4, 1966, 708-713

TOPIC TAGS: thermal decomposition, germanium compound, METAL FILM

ABSTRACT: The reaction of thermal decomposition of monogermane on the surface of a germanium film was studied in the range of 289-379°. The reaction proceeds along two parallel paths. A zero-order reaction takes place on the surface and depends on the nature of the latter. The germanium film catalyzes the thermal decomposition of monogermane. As the surface increases and the temperature is lowered, the zero-order reaction predominates. A first-order reaction becomes appreciable as the temperature is raised and the volume of the reaction vessel increases. The high activation energy during the induction period leads to the conclusion that the induction period is due to the generation of active centers on the surface of the reaction vessel. This in turn accounts for the higher value of the rate constant of the homogeneous reaction in a vessel whose walls are covered with a germanium film. Authors thank N. V. Moskvina for assistance in carrying out the experiment, and Yu. L. Kotkov and

Card 1/2 UDC: 546.289'11

L 41365-66

ACC NR: AP6022888

I. M. Kurakina for processing the experimental data with a computer. Orig. art. has: 7 figures, 4 tables, and 9 formulas.

SUB CODE: 07/ SUBM DATE: 13Jul64/ ORIG REF: 005/ OTH REF: 009

Card 2/2

L 42880-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6022889 SOURCE CODE: UR/0078/66/011/004/0714/0719

AUTHOR: Devyatykh, G. G.; Frolov, I. A.; Agliulov, N. Kh. 39 B

ORG: none

TITLE: Preparation of high-purity monogermane

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 4, 1966, 714-719

TOPIC TAGS: germanium compound, high purity metal, rectification

ABSTRACT: A method for preparing high-purity monogermane containing less than 1 x 10^{-4}% impurities is described. The source of the impurities are thought to be the chloro derivatives of carbon present in $GeCl_4$. Monogermane was obtained by reducing commercial $GeCl_4$ with an aqueous $NaBH_4$ solution, and the impurities present were determined by mass spectrometry. The impurities (methane, ethane, ethylene, arsine) were removed from monogermane by rectification and their relative volatilities were determined for various concentrations in the systems C_2H_4-GeH_4, AsH_3-GeH_4, and C_2H_6-GeH_4. All the solutions obeyed Henry's law at low concentrations, but did not obey Raoult's law, with the exception of the solution of ethylene in monogermane. The relative volatilities were found to be sufficiently high to allow the use of rectification for a thorough removal of these impurities from monogermane. Orig. art. has: 6 figures, 2 tables, and 2 formulas.

SUB CODE: 07/ SUBM DATE: 16Jun65/ ORIG REF: 004/ OTH REF: 005

Card 1/1 UDC: 546.289'11.05

ACC NR: AP7002818 SOURCE CODE: UR/0078/66/011/012/2681/2684

AUTHOR: Vlasov, S. M.; Devyatykh, G. G.

ORG: Gorkiy State University im. N. I. Lobachevskiy (Gor'kovskiy gosudarstvennyy universitet); Laboratory of Polymer Stabilization, Academy of Sciences, SSSR (Laboratoriya stabilizatsii polimerov Akademii nauk SSSR)

TITLE: Viscosity and potential energy of intermolecular forces of certain volatile hydrides of group III-VI elements

SOURCE: Zhurnal neorganicheskoy khimii, v. 11, no. 12, 1966, 2681-2684

TOPIC TAGS: hydride, volatile hydride, gas viscosity, viscosity measurement, intermolecular force

ABSTRACT: The viscosities of diborane, methane, monosilane, monogermane, stannane, phosphine, arsine, stibine, and hydrogen selenide have been measured in the 193—273K range by the capillary tube method with an accuracy within 0.5%. The procedure and equipment are described in the source. The results of the experiments can be expressed by the formula $\eta = KT^S$, where K and S are constants. The values of η, K, and S are given in Table 1. The viscosity values of CH_4, PH_3, and AsH_3 at 273K are in good agreement with literature data, but there is a

 UDC: 541.44--13:533.16

discrepancy in the viscosity value of SiH_4. It is claimed that the viscosities of the other hydrides in Table 1 have been measured for the first time. The potential energies of intermolecular forces of the hydrides were calculated from the Lennard-Jones equation for the potential energy of nonpolar molecules

$$\varphi(r) = 4\varepsilon\left[\left(\frac{\sigma}{r}\right)^{12} - \left(\frac{\sigma}{r}\right)^{6}\right],$$

where $\varphi(r)$ is the potential energy of two molecules interacting at distance r, ε is the value of potential energy at the minimum, and σ is the effective diameter of the molecule. The constants of the Lennard-Jones equation were calculated from the temperature dependence of the viscosity of the hydrides. The calculation procedure is described in the source. The values of the constants are given in Table 2. The values of the force constants of CH_4 and AsH_3 are in good agreement with literature data. Orig. art. has: 1 figure and 2 tables.

[W. A. 77]
[BO]

ACC NR: AP7002818

Table 1. Values of the viscosities of the hydrides (at 273K) and of the coefficients K and S in the formula $\eta = KT^S$

1	2	3	4	5
CH_4	193--273	5,902	0,9190	1023
SiH_4	193--273	3,392	1,0125	994
GeH_4	193--273	4,691	1,018	1416
SnH_4	233--273	5,740	1,020	1753
PH_3	193--273	3,648	1,013	1073
AsH_3	213--273	4,984	1,015	1477
SbH_3	243--273	5,991	1,017	1795
H_2Se	233--273	5,069	1,020	1548
B_2H_6	203--273	2,660	1,014	785

1 - Hydride; 2 - Temperature range, $K \cdot 10^7$; 3 - $K \cdot 10^7$; 4 - S; 5 - $\eta \cdot 10^7$, poises at 273K

Table 2. Constants of the intermolecular forces in the Lennard-Jones equation

Hydride	$\frac{\epsilon}{K}$, °K	σ, Å	Hydride	$\frac{\epsilon}{K}$, °K	σ, Å
CH_4	148	3,776	PH_3	270	3,897
SiH_4	265	4,011	AsH_3	277	4,061
GeH_4	285	4,100	SbH_3	290	4,097
SnH_4	290	4,127	H_2Se	320	3,860
			B_2H_6	270	4,329

SUB CODE: 21, 07/ SUBM DATE: 18Mar65/ ORIG REF: 002/ OTH REF: 006

Card 3/3

1204. **Rapid photocolorimetric method for estimating sulphur in cast iron.** G. Ciutacu and A. Dena. *Stud. Cerc. Chim., Bucharest*, 1953, **3** (3–4), 293–300.—The sample of cast iron is attacked with conc. HCl, and the H_2S evolved is passed into a 0·2% soln. of *p*-aminodimethylaniline. On treating the soln. with $FeCl_3$, the characteristic colour of methylene blue is developed, and the extinction of the soln. is measured. For the preparation of the reagent, the use of the more stable *p*-acetamidodimethylaniline is recommended. I. H. MAYOR

DEWALD, A.

New methods of direct analysis of each piece. p. 8. TEHNICA NOUA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor) Bucuresti. Vol. 3, No. 34, Feb. 1956.

So. East European Accessions List Vol. 5, No. 9 September, 1956

DEWALD, A.

Rapid photometric method for the determination of phosphorus in steels. A. Dewald. *Acad. rep. populare Romîne, Baza cercetări ştiinţ. Timişoara, Studii cercetări ştiinţ. Ser. Ştiinţ. chim.* 4, 111–15(1957).—Dissolve the steel in HNO_3 + $HClO_4$, treat the soln. with a 5% $(NH_4)_2MoO_4$ soln., ext. the heteropolyacid formed with AcOBu, and then det. the yellow color in the org. layer. This method works well with steels which contain C as the essential alloying element and only small amts. of other elements. Can det. amts. of 0.01–0.1% P in 10 min. W. J.

3
1

Distr: 4E2c

JAROSZEWICZ, Lucja; STUCHLIK, Elzbieta; TYSZKIEWICZ, Magdalena, dr. med.; DE WALDEN, Jolanta.

Stuttering in children -- its causes and significance. Neurol., neurochir. psychiat. Pol. 14 no.6:909-913 N-D '64

1. Z Poradni Zdrowia Psychicznego w Gdyni (Kierownik: dr. med. M. Tyszkiewicz).

DEWER, M.

Underestimating the harmfulness of glass wassing. p. 299.

OCHRONA PRACY: BEZPIECZENTWO I HIGINA PRACY
Vol. 9, no. 9, Sept. 1955
Warszawa

Source: Monthly List of East European Accessions (EEAL), LC, Vol. 5, no. 2, Feb. 1956

DEWHURST, A.

Canadian trade-unions and their struggle for unity of action.

TECHNIKA. (Politechnika Szczecinska) Poznan.
No. 4, 1958.

Monthly list of East European Accessions (EEAI) LC, Vol.9, no.1, Jan. 1959.

Uncl.

DEWOR, M.; DYBAL, K.

12th Conference of the Association of Engineers and Technicians of the Metallurgic Industry, p. 190

PROBLEMY PROJEKTOWE HUTNICTWA. (Biuro Projektow Przemyslu Hutniczego, Biuro Projektow Przemyslu Stalowego i Biuro Projektow Przemyslu Metalowego) Cliwice, Poland, Vol. 7, no. 6, June 1959

Monthly list of East European Accession (EEAI) LC., Vol. 9, No. 1, Jan 1960

Uncl.

L 58826-65

ACCESSION NR: AR5002385 S/0271/64/000/010/A014/A014
621.398.694.4-531.7

SOURCE: Ref. zh. Avtomat., telemekh. i vychisl. tekhn., Sv. t., Abs. 10A112

AUTHOR: Dey, E.

TITLE: Laboratory investigation of high temperature tensometers which are used for measuring strain at temperatures up to 480C

CITED SOURCE: Sb. Vysokotemperat. tenzodatchiki. M., 1963, 49-58

TOPIC TAGS: tensometer, high temperature tensometer

TRANSLATION: Six types of tensometers were used to investigate the effect of temperature on the tenso-sensitivity factor, the zero-point drift, and the magnitude and nature of the apparent strain with and without a circuit-type compensation. The highest temperature in the tests was 480C. Each result was averaged from 6-8 measurements. The tensometer-furnace lead-in wires were made from constantan, and their resistance did not exceed 2% of nominal tensometer resistance. In the experiments, the tensometer was cemented to a cantilever beam of stainless 0.52-mm-thick steel bent by a load. Tensometer signals were measured by a Wheatstone bridge. To determine the apparent strain, tests were

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L 58826-65

ACCESSION NR: AR5002385

staged wit a heated loaded and unloaded beam. The zero-point drift was observed at tempera ures over 370C, increasing with the temperature. The tenso-sensitivity factor var ed rather erratically, and lay between ± 5.5% and ± 30% depending on the tensometer type; however, for most tensometers, a slight decrease in this factor with an increase of temperature, was observed. Two of the investigated tensometer types exhibited a high degree of temperature compensation, others were very poor. Seven illustrations. Bibliography: 1 title

SUB CODE: PR, IE

Card 2/2 dm

SHTENGER, A.V., inzh.; BUBLIS, A.P., inzh.; DEY, G.T., inzh.

Premature explosions of electric detonators under the action of capacitance currents in cables. Bezop. truda v prom. 6 no.7:18-20 Jl '62. (MIRA 15:7)

1. Leninogorskiy polimetallicheskiy kombinat.
(Detonators)

SAMYGIN, V.D.; DERYAGIN, B.V.; DUKHIN, S.S.

Study of the Dorn effect on air bubbles. Koll. zhur. 26 no.4:493-501 Jl-Ag '64. (MIRA 17:9)

1. Institut fizicheskoy khimii AN SSSR, Nauchno-issledovatel'skiy institut tsvetnykh metallov i Institut obshchey i neorganicheskoy khimii AN UkrSSR.

DEYAK, M.

DEYAK, M., shofer stantsionnogo elevatora (Karabalykskiy rayon, Kustanayskaya oblast').

Once more on shortcomings of the PMG-6 fire engines. Pozh.delo 3 no.9:17 S '57. (MLRA 10:9)

(Fire engines)

DEYANOV, B. YA. MAJ.

PA 18/49T39

USSR/Medicine - Wounds Nov 48
Medicine - Sulfanilamide and Sulfanilamide Derivatives

"Intra-Arterial Administration of Sulfidine Solution as a Therapeutic and Prophylactic Measure Against Meningitis in Cases With Penetrating Wound in the Skull," Maj T.G. Vlasov, Med Corps, Maj B.Ya. Deyanov, Med Corps, Nth Army Spec Hosp, 2 3/4 pp

"Khirurgiya" No 11

Summarizes own experience on subject. Presents data showing monthly death rate from meningitis in 1944. Concludes that intra-arterial injection of a 10% sulfidine solution into carotid prevents onset of

18/49T39

USSR/Medicine - Wounds (Contd) Nov 48

meningitis in subject cases. Treatment of meningitis by intra-arterial injection of sulfidine lowers death rate. Such injections do not cause complications. Simplicity in preparation and carotid injection of sulfidine enhance its use even on battlefield.

18/49T39

DMITANOV, D.Ye.

Improved counting and weighing mechanism. Tekst.prom. 14 no.7: 47-48 Jl '54. (MLRA 7:8)

1. Glavnyy inzhener Melenkovskogo l'nokombinata "Krasnyy tekstil'-shchik".
(Textile machinery)

DEYANOV, I. G.

Deyanov, I. G. - "Weeding fields choked with thistle," Trudy Azovo-Chernomor. in-ta mekhanizatsiya sel. Khoz-va, Issue 6, 1948, p. 53-61.

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

DEYANOV, I.G.

AUTHOR : Deya...
CATEGORY : Weeds and Weed Control.

ABS. JOUR : Ref Zhur -Biology., No.5 , 1959, No. 20588

AUTHOR : Deyanov, I.G.
INST. : Azovo-Chernomorsk Inst.of Mechanization of Agric.
TITLE : The Effectiveness of Fernoxon and Shell M. 40 ; Herbicides in Weed Control During 1956.

ORIG. PUB.: Sb. nauchno-tekhn. rabot. Azovo-Chernomorsk. in-t, mekhaniz, s.-kh., 1957, vyp. 10, 125-146

ABSTRACT : At the Experiment Training Sovkhozes of Azovo-Chernomorsk Institute of Agriculture (Rostovskaya Oblast) a study was made of the effectiveness of two English herbicides, "Fernoxon" and "Shell M. 40" to control weeds in heavily overweeded sudan grass plantings. "Fernoxon" contains 80% sodium salt of 2,4-dichlorophenoxy-acetic acid. The fine white powder produces a precipitate when dissolved in water. Shell M.40 is the conventional name for the potassium

CARD: 1/2

COUNTRY : USSR
CATEGORY : Weeds and Weed Control. N

ABS. JOUR : Ref Zhur-Biologiya, No. 4, 1959, No. 15882

AUTHOR : Deyanov, I.G.
INST. : Azovo-Chernomorsk Inst. of Mechanized Agriculture
TITLE : The Control of Canada Thistle under Irrigation in Rostovskaya Oblast.

ORIG. PUB. : Sb. nauchno-tekhn. rabot. Azovo-Chernomorsk. in-t mekhaniz. s. kh., 1957, vyp. 10, 147-162

ABSTRACT : The thistle is most effectively destroyed by deep spring tilling at the time the thistle (Cirsium) rosettes appear on a large scale (this is also seen in unirrigated plots). Spring spraying with a 1.5-2 kg dose of 2,4-D has suppressed and killed the canada thistle. Deep plowing in conjunction with preliminary surface plowing and 2,4-D applied in 1.5-2 kg/ha. doses on two occasions are an effective means of controling canada thistle.--V.D. Astaf'yeva

CARD: 1/1

DEYANOV, V.A.

AID P - 3335

Subject : USSR/Power Engineering

Card 1/1 Pub. 26 - 21/28

Authors : Deyanov, V. A. and V. V. Romantsov, Engs.

Title : Improving the method of feeding automatic controls of the electromechanical equipment

Periodical : Elek. sta., 8, 53-54, Ag 1955

Abstract : The article discusses the operation of rectifiers with or without stabilizers. Defects and irregularities in the supply of dc current for the operation of automatic controls and their causes are discussed. It is suggested that rectifiers of the VSA-4 type be replaced by some new type. Three diagrams.

Institution : None

Submitted : No date

DEYANOV, V.A.

112-2-2879

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 2, p. 45 (USSR)

AUTHOR: Deyanov, V. A.

TITLE: Systems for Automatic Regulation of Karaganda GRES Once-Through Boilers (Skhemy avtoregulirovaniya pryamotochnykh kotlov Karagandinskoy GRES)

PERIODICAL: Naladochnyye i eksperim. raboty ORGRES, 1956, Nr 12, pp. 52-56

ABSTRACT: Automatic controllers of the Siemens Company are equipped with contact galvanometers. The control system provides for the action of a piston pressure gauge on the group manipulator master (with position feedback) which operates the controls of power supply, fuel, air, and of the steam temperature. The temperature regulator is actuated by the temperature difference of the inlet and outlet water from the impulse tube. It also adjusts the water-fuel ratio. In addition to this, there is an injection regulator with an extra "high-speed" thermocouple. The OKB (Experimental Design Office) control system using electronic regulators provides for the action of a piston pressure gauge on the regulators governing the water and fuel feeds.

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Systems for Automatic Regulation of Karaganda GRES Once-Through Boilers (Cont.)

The impulses to the fuel regulator are actuated by the steam temperture behind the transition zone and by the rate of temperature change of the gases. The impulses to the injection regulator are actuated by the superheat temperature behind the superheater, and the temperature behind the injection point. The injection regulator receives a high-speed impulse at the outlet of the impulse tube by-passing the economizer. The air consumption is controlled by the water consumption. In the ORGRES system the fuel feed is regulated by the steam pressure. The water feed is regulated by the steam-water ratio and is adjusted by the steam temperature regulator on the other side of the transition zone through the magnetic starter and the thermal converter of the dying out pulse (the Siemens System). Injection control is actuated with a water consumption feedback by the steam temperature behind the transition zone and by the rate of change of this temperature.

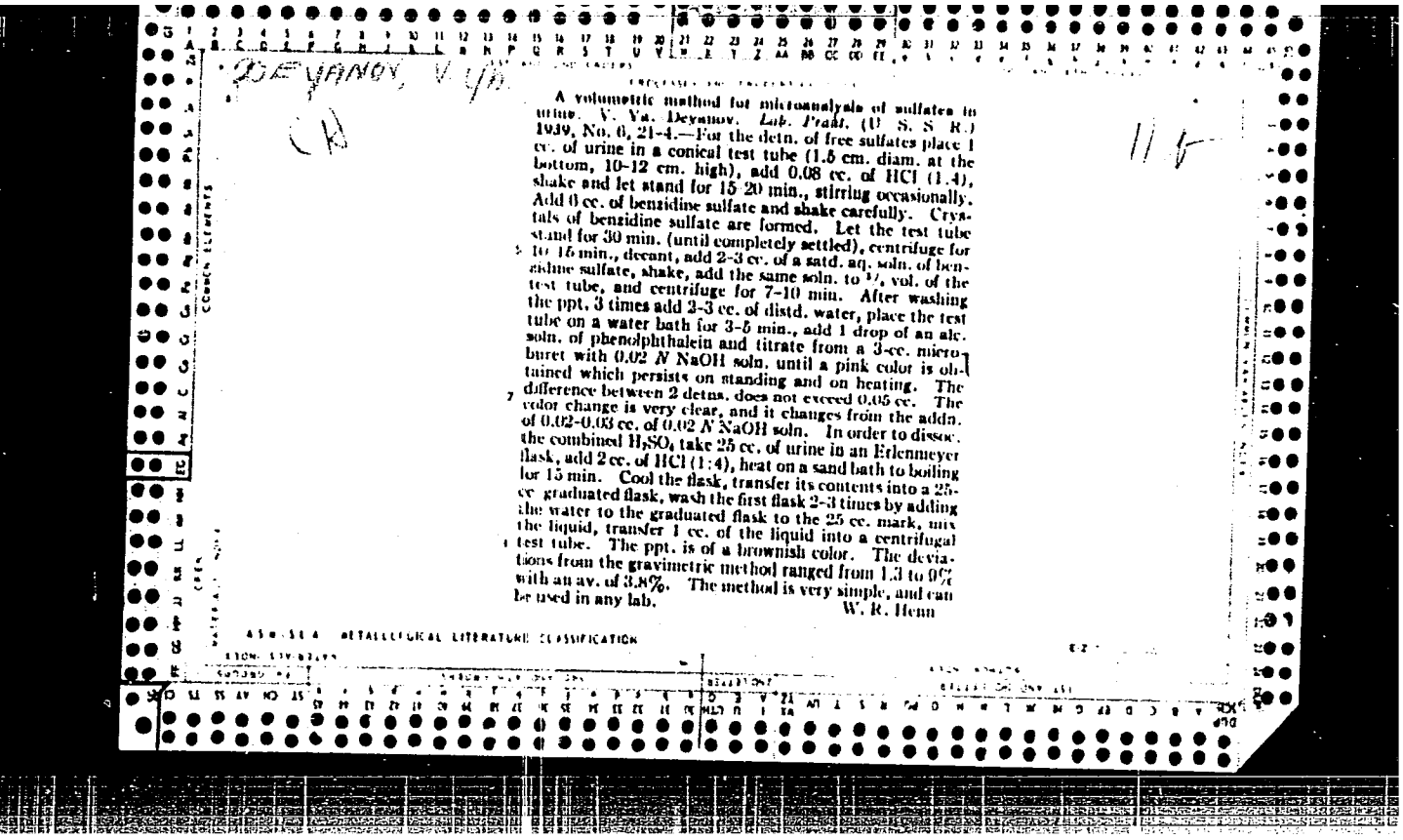
V.D.M.

ASSOCIATION: Office for the Organization and Standardization of Regional Electric Power Plants and Networks (ORGRES).

Card 2/2

DEYANOV, Vladimir Aleksandrovich; RUSANOV, A.A., red.; BUL'DYAYEV, N.A., tekhn. red.

[Automation, protection, and signaling in electric power plants] Avtomatizatsiia, zashchita i signalizatsiia na elektrostantsiiakh. Moskva, Gosenergoizdat, 1963. 383 p. (MIRA 17:2)



A volumetric method for microanalysis of sulfates in urine. V. Va. Deyanov. *Lab. Prakt.* (U. S. S. R.) 1939, No. 6, 21-4.—For the detn. of free sulfates place 1 cc. of urine in a conical test tube (1.5 cm. diam. at the bottom, 10–12 cm. high), add 0.08 cc. of HCl (1:4), shake and let stand for 15–20 min., stirring occasionally. Add 0 cc. of benzidine sulfate and shake carefully. Crystals of benzidine sulfate are formed. Let the test tube stand for 30 min. (until completely settled), centrifuge for 5 to 15 min., decant, add 2–3 cc. of a satd. aq. soln. of benzidine sulfate, shake, add the same soln. to ¾ vol. of the test tube, and centrifuge for 7–10 min. After washing the ppt. 3 times add 2–3 cc. of distd. water, place the test tube on a water bath for 3–5 min., add 1 drop of an alc. soln. of phenolphthalein and titrate from a 3-cc. microburet with 0.02 *N* NaOH soln. until a pink color is obtained which persists on standing and on heating. The difference between 2 detns. does not exceed 0.05 cc. The color change is very clear, and it changes from the addn. of 0.02–0.03 cc. of 0.02 *N* NaOH soln. In order to dissoc. the combined H_2SO_4 take 25 cc. of urine in an Erlenmeyer flask, add 2 cc. of HCl (1:4), heat on a sand bath to boiling for 15 min. Cool the flask, transfer its contents into a 25-cc. graduated flask, wash the first flask 2–3 times by adding the water to the graduated flask to the 25 cc. mark, mix the liquid, transfer 1 cc. of the liquid into a centrifugal test tube. The ppt. is of a brownish color. The deviations from the gravimetric method ranged from 1.3 to 0% with an av. of 3.8%. The method is very simple, and can be used in any lab.

W. R. Henn

DEYANOV, V. Ya.

Deyanov, V. Ya. - "Vegetative-vascular dystonia in neurotic reactions and the so-called "neuropathy" in children and adolescents," Trudy Tsentr. in-ta psikhiatrii, Vol. IV, 1949, p. 172-79

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

DEYANOV, V.Ya.

Angiospastic and convulsive syndrome in rheumatism in children and adolescents. Zhur.nevr. i psikh. 56 no.9:698-702 '56. (MLRA 9:11)

1. Detskaya psikhiatricheskaya klinika (zav. - prof. G.Ye.Sukhareva) Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiatrii Ministerstva zdravookhraneniya RSFSR, Moskva.

(BLOOD VESSELS, diseases,
spasm caused by rheum. in child. & adolescents (Rus))
(CONVULSIONS, etiology and pathogenesis,
rheum. in child. & adolescents (Rus))
(RHEUMATISM, complications,
angiospasm & convulsions in child. & adolescents (Rus))

DEYANOV, V.Ya.; SUKHAREVA, G.Ye., zasl. deyatel' nauki, red.;
FEDOTOV, D.D., prof., otv. red.;

[Psychic disorders associated with rheumatism in children and adolescents]Psikhicheskie narusheniia pri revmatizme u detei i podrostkov. Pod red. G.E.Sukharevoi. Moskva, Gos. nauchno-issl. in-t psikhiatrii MZ RSFSR, 1962. 188 p.
(MIRA 15:10)

(RHEUMATIC FEVER) (NERVOUS SYSTEM--DISEASES)
(MENTAL ILLNESS)

FEDOTOV, D.D., prof., otv. red.; VRONO, M.S., red.; DEYANOV, V.Ya., red.; LAPIDES, M.I., red.; MAMTSEVA, V.N., red.; YURKOVA, I.A., red.; NOVLYANSKAYA, K.A., red.; ROKHLIN, L.L., red.; SKANAVI, Ye.Ye., red.

[Problems of pediatric psychoneurology] Problemy psikhonevrologii detskogo vozrasta. Moskva, 1964. 530 p. (MIRA 18:5)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut psikhiatrii. 2. Klinika psikhozov detskogo vozrasta Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiatrii Ministerstva zdravookhraneniya RSFSR (for Skanavi, Lapides). 3. Kafedra detskoy psikhiatrii TSentral'nogo instituta usovershenstvovaniya vrachey (for Novlyanskaya, Mamtseva, Vrono).

DEYANOV, Ye.; LYACHIN, I., inzh.-elektrik

Automatic through-drive truck elevator at the Kustanay transshipment base. Mukomelev.prom. 27 no.5:25 My '61. (MIRA 14:6)

1. Kustanayskaya perevalochnaya baza. 2. Glavnyy energetik Kustanayskoy perevalochnoy bazy (for Deyanov).

(Motortrucks)
(Loading and unloading)

GRADEV, Khr.; DEYANOVA, Iv. [Deianova, Iv.]; KOLOVINSKIY, V.V.

Larvicidal action and the economic effect of phenol oils in mosquito control; an abstract. Med. paraz. i paraz. bol. 33 no.5:615 S-O '64. (MIRA 18:4)

1. Okruzhnaya sanitarno-epidemiologicheskaya stantsiya, Burgas, Bolgariya.

Deyanova, I.I.

USSR/Forestry - Forest Plants. K-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10607

Author : Tsyurupa, B.N., Deyanova, I.I.

Inst : Botanical Garden of Rostov-na-Donu University

Title : Swelling of Certain Woody-Undergrowth Seeds.

Orig Pub : Sb. tr. Botan. sada Rostovsk. n/D un-ta, 1956, 35, No 2, 103-108.

Abstract : A study was made of swelling of honey locust, tartar maple, sharp-leafed maple, small-leafed and large-leafed linden, /svidina/, dog rose, privet, amorfa, fluffy ash, and eastern white cedar seeds in moist sand and in water at temperatures of 10° and 20°. It has been clarified that both in water and in moist sand the water is absorbed by all species more intensively at 20° temperature than at 10°. The following periods of swelling before stratification in

Card 1/2

ACC NR: AP6035730 (A) SOURCE CODE: UR/0413/66/000/019/0094/0094

INVENTOR: Al'ftan, E. A.; Deyanova, S. V.; Firsov, A. M.; Miklashevskiy, S. A.; Afonina, L. G.; Mednikov, M. M.

ORG: none

TITLE: Thermocouple. 14 Class 42, No. 186733

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 94

TOPIC TAGS: thermocouple, microthermocouple, temperature instrument

ABSTRACT: This Author Certificate introduces a thermocouple (see Fig. 1) containing a wire surrounded by a metal layer, which is isolated from the wire by an insulating layer, so the metal layer contacts the wire only at the tip. To attain

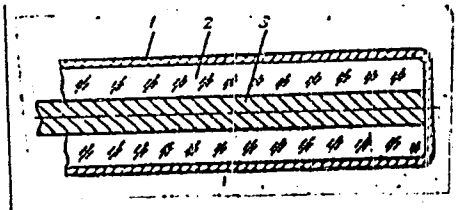


Fig. 1. Longitudinal section through thermocouple

1 - Metal layer; 2 - glass insulation; 3 - microwire. 15

Card 1/2 UDC: 536.532-181.4002.4

ACC NR: AP6035730

microminiaturization of the thermocouple, the outer metal layer is deposited in the shape of a cylinder on the glass-insulated microwire. Orig. art. has: 1 figure.

SUB CODE: 13, 14/ SUBM DATE: 28Jun65/ ATD PRESS: 5106

Card 2/2

BRAZHENKO, A.D., inzh.; DEYASHKIN, K.I., inzh.; GANCHO, V.M., inzh.

Two-step installation of a converter substation with mercury-arc rectifiers. Prom. energ. 19 no.5:30-33 My '64.
(MIRA 17:6)

L 01310-67 EWT(1) GW

ACC NR: AT6013748 SOURCE CODE: UR/2789/65/000/067/0055/0058

AUTHOR: Deyashkin, R. V.

39
B+1

ORG: none

TITLE: Two-frequency radio transponder

SOURCE: Tsentral'naya aerologicheskaya observatoriya, no. 67, 1965. Metody i resul'taty aerologicheskikh nablyudeniy (Methods and results of aerological observations), 55-58

TOPIC TAGS: transponder, navigation equipment, navigation aid, radiosonde

ABSTRACT: A 216-Mc superregenerative transponder -- the result of remodeling a PRB-1,5 transmitter by introducing an auxiliary 2SZA-tube oscillator -- is briefly described. On interrogation by a strong pulse at its carrier frequency, the transponder discontinues its signal for a short time. Measuring the time lag between the interrogation and the response signals gives the slant distance to a radiosonde carrying the transponder. The FM radiosonde modulates the carrier either by 270 or 330 kc. A ground radar controls the transponder. Laboratory tests revealed that the battery life was 4--4.5 hrs, that the transponders could operate at temperatures down to -70 or -80C, and that the carrier frequency drifted upwards by about 2--3 Mc under such cold conditions. Ten transponders were field-tested; all of them could be tracked by "Malakhit" type radio theodolite up to the point of balloon burst, with an average range of 120 km. Orig. art. has: 3 figures and 1 formula.

Card 1/1 SUB CODE: 17, 09 / SUBM DATE: none

FINKEL', V.M.; ZRAYCHENKO, V.A.; DEYASHKINA, T.K.

Characteristics of cementite decomposition in hypereutectoid steel. Izv. vys. ucheb. zav.; chern. met. 6 no.10:95-100 '63. (MIRA 16:12)

1. Sibirskiy metallurgicheskiy institut.

FINKEL', V.M.; ZRAYCHENKO, V.A.; DEYASHKINA, T.K.

Investigating crack growth in transformer and certain carbon steels. Fiz. met. i metalloved. 16 no.3:448-456 S '63. (MIRA 16:11)

1. Sibirskiy metallurgicheskiy institut imeni S.Ordzhonikidze.

DEYCH, A. N.

"A New Star 'White Dwarf'," Dok AN, 22, No 7, 1939.

Central Astronomical Observatory, Pulkovo

DEYCH, A. N.

"Secular Parallaxes of Faint Stars as Deduced from Pulkovo Catalogue Data on Proper Motions in Kapteyn Areas," Dok AN, 44, No 3, 1944.

Main Astronomical Observatory, Pulkovo, AS USSR

DEYCH, A.N., prof.

Proper motions of stars. Vest.LGU 2 no.8:3-9 Ag '47.
(MIRA 12:9)

(Stars--Proper motion)

DEYCH, A. N.

Deych, A. N. "Photographic astrometry," in symposium: Astronomiya v SSSR za tridtsat' let, Moscow-Leningrad, 1948, p. 33-38

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

DEYCH, A. N.

"Determination of the Photographic Position of an Object by Two and Three Supporting Stars," Astron. Zhur., 25, No 1, 1948

Pulkovo Observatory.

DEYCH, A.N.

[Using extragelactic objects to establish an absolute system of proper motions of stars; report at the eight International Congress of Astronomy, Rome 1952.] Ispol'zovanie vnegalakticheskikh ob"ektov dlia postroeniia absoliutnoi sistemy sobstvennykh dvizhenii zvezd; doklad na VIII s"ezde Mezhdunarodnogo astronomicheskogo soiuza, Rim, 1952. Moskva, Izd-vo Akad.nauk SSSR, 1952. 33 p.[Microfilm]
(Stars--Proper motion) (MLRA 8:9)

DEYCH, A.N.; LAVDOVSKIY, V.V.; FATCHIKHIN, N.V.; GAMALEY, N.V.

Selected areas of the sky with extragalactic nebulae for measuring proper motions of stars. Izv.Glav.astron.obser. 19 no.3:12-17 '53. (MLRA 7:1)
(Stars--Proper motion) (Nebulae)

DEICH, A.N., doktor fiziko-matematicheskikh nauk [reviewer]; STRUVE, Wilhelm, 1793-1864 [author].

Great traditions of Russian science ("Studies of stellar astronomy." W.Struve. Reviewed by A.N.Deich). Vest.AN SSSR 23 no.12:115-117 D '53. (MLRA 6:12)

(Struve, Wilhelm, 1793-1864) (Milky way)

DEYCH, A.N.

Letter to the editor on the problem of the dark satellite of 61 Cygni.
Astron.zhur. 30 no.3:366-367 My-Je '53. (MLRA 6:5)
(Stars, Double)

DEYCH, A. N.

USSR/Astronomy - Position, Computation of Nov/Dec 53

"Remark Concerning the Determination of the Photographic Position of an Object From Two Reference Stars," A.N. Deych, Main Astron Observ, Acad Sci USSR

Astron Zhur, Vol 30, No 6, pp 653-654

Derived formulas for detn of position, assuming as known, the declination of the optical center of the plate. This method was applied by L.A. Kataseva and A.K. Sosnova at Stalinabad Observ to measure traces of meteors. Attempts to simplify computation by substituting declination of center of

273177

plate by mean declination of reference stars. This method is analyzed further in the next article by F.F. Bulatova. Rec 4 Oct 53.

DEYCH, A. N.

USSR/Astronomy - Position, Computation of Nov/Dec 53

"Comparison of Methods by A. N. Deych and A. Koenig Concerning Photographic Determination of Postion of Object From Two Reference Stars," F.F. Bulatova Main Astron Observ, Acad Sci USSR

Astron Zhur, Vol 30, No 6, pp 655-658

Compares basic formulas by A. N. Deych (Astron Zhur 25, 1 (1948) and by A. Koenig, (A. N. 277, 1949) and presents computations by both methods. Rec 4 Oct 53.

DEYCH, A.N.

Photographic astrometry. Usp.astron.nauk 6:144-162 '54.(MLRA 7:8)
(Astrometry)

DEYCH, A-N.

AID P - 381

Subject : USSR/Astronomy

Card 1/2 Pub. 8 - 11/12

Author : Ikaunieks, Ya.

Title : Review of the book: "T. A. Agekyan. Star Universe"

Periodical : Astron. zhur., v. 31, 3, 299-301, My-Je 1954

Abstract : The book was published in 1952 by the Leningrad State University in 176 pages and 10,000 copies, and edited by Prof. A. N. Deych. The text contains: 1) the history of the calculation of the number of stars; 2) the proper motions of stars; 3) the great variety of stars in size, constitution, brightness, etc.; 4) the light and dark diffused clouds and nebulae; 5) the other galaxies; and 6) the evolution of the stellar world. Many tables, examples. Criticism is made of some definitions given without explanation, and of some incorrect statements. It is further stated that the book is already out-of-date in some parts. The results of the theory of relativity are not introduced. The edition is very poorly published and a second edition is advised.

AID P - 381

Astron. zhur., v. 31, 3, 299-301, My-Je 1954

Card 2/2 Pub. 8 - 11/12

Institution : Not given

Submitted : No date

DEYCH, A.N.; LAVDOVSKIY, V.V.; PATCHIKHIN, N.V.

Catalog of 1508 extragalactic nebulae in 157 sky regions of the area from 90^0 to -5^0 declination, selected for the determination of proper motions of stars. Izv.GAO 20 no.1: 14-46 '55. (MIRA 13:5)

(Nebulae--Catalogs)

DEYCH, A. N., Prof. and MIKHEL'SON, N. N.

"Automatic Blink-Comparator," a report presented at the Conference of Commission on Astronomical Instruments Construction of the Astronomical Council, AS USSR, 10-12 Feb 56.

Sum. No. 1047, 31 Aug 56

DEYCH, A.N.

Comments on S.K. Kostinskii's biography (based on archive materials). Int.-astron. issl. no.3:611-624 '57. (MIRA 11:3)
(Kostinskii, Sergei Konstantinovich, 1867-1936)

DEYCH, A.N.

Dark satellite of 61 Cygni. Izv.GAO 21 no.1:62-82 '57.
(MIRA 13:4)

(Stars, Double) (Satellites)

DEYCH, A.N., professor.

The Arend-Roland comet. Priroda 46 no.6:105-106 Je '57. (MLRA 10:7)

1. Glavnaya astronomicheskaya observatoriya Akademii nauk SSSR (Pulkovo).

(Comets)

DEYCH, A.N.

DEYCH, A.N.

Dark satellite of 61 Cygni. Astron.tsir. no.178:16-19 Mr '57.
(MLRA 10:9)
(Stars, Variable)

DEYCH, A.N.

Observations of Arend-Roland's comet (1956 h). Astron.tsir. no.180:16-17 My '57. (MIRA 13:4)
(Comets--1956)

3(1),29(2)

AUTHOR: Deych,A.N.

TITLE: The Determination of the Photographic Position of an Earth Satellite, Using Two Reference Stars (Opredeleniye fotograficheskogo polozheniya iskusstvennogo sputnika zemli po dvum opornym zvezdam)

SOV/33-35-5-18/20

PERIODICAL: Astronomicheskiy zhurnal, 1958, Vol 35, Nr 5, pp 810-818 (USSR)

ABSTRACT: Basing on a method proposed by the author in 1948 [Ref 1] he gives a process for the determination of the photographic position of a satellite by direct reference to two stars with known equatorial coordinates. In general the calculations are carried out up to terms of second order; only for great declinations third order terms are considered too. The exactness of the results is 1S in α and 0'.2 in δ under the assumption that the declination is $\leq 60^{\circ}$, the distance between the reference stars is $\leq 5^{\circ}$ and the distance from the optical center is $\leq 15^{\circ}$. There are 4 figures, 5 tables, and 3 Soviet references.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya Akademii nauk SSSR (Astronomical Principal Observatory of the AS USSR)

SUBMITTED: May 10, 1958

Card 1/1

SOV/35-59-8-6163

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959, Nr 8, p 11

AUTHORS: Deych, A.N., Skharov, V.I.

TITLE: The 14 Astrometric Conference in USSR

PERIODICAL: Astron. tsirkulyar, 1958, August 26, Nr 194, pp 30 - 31

ABSTRACT: There is a report on the 14 Astrometric Conference in the USSR, which took place in Kiyev from May 27 - 30, 1958. The representatives of 20 observatories and institutes of the Soviet Union, as well as the astronomers of Poland and the ChPR took part in the work. The Conference summarized the main results of the work in the field of astrometry, carried out in the USSR since the time of the XII Astrometric Conference (December 1955), and the most important problems confronting the astrometrists in connection with the V Assembly of SK and KS IGY and the X Congress of IAU were discussed. The Conference outlined the ways of development for Soviet Astrometry for the next few years. See also RZhAstr., 1959, Nr 3, 1782.

Card 1/1

N.B.P.

Deych, A. N.

PHASE I BOOK EXPLOITATION SOV/4374

Astronomiya v SSSR za sorok let 1917 - 1957; sbornik statey (Forty Years of Astronomy in the USSR, 1917-1957; Collection of Articles) Moscow, Fizmatgiz, 1960. 728 p. 2,000 copies printed.

Ed.: L. V. Samsonenko; Tech. Ed.: N. A. Tumarkina; Editorial Board: A. A. Mikhaylov (Resp. Ed.), M. S. Zverev, P. G. Kulikovskiy, A. G. Masevich, E. R. Mustel'; V. V. Sobolev, and M. F. Subbotin.

PURPOSE: This book is intended for astronomers, astrophysicists, and others interested in the history of astronomy in the USSR.

COVERAGE: This major work on the history of astronomy in the USSR consists of two parts, review articles and bibliographies. Part I contains a collection of articles on various facets of astronomical research written by leading Soviet specialists in the field. Chief emphasis is placed on developments of the last ten years. The research activities and equipment of 23 Soviet observatories and institutes are described, and the leading scientific personalities of each mentioned. The geographic coordinates and elevations of 41 astronomical centers are listed. Individual articles discuss problems dealing with

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theoretical astronomy, minor planets, comets and meteors, the physics of stellar atmospheres and gaseous nebulae, cosmogony, and radioastronomy. Part II contains a comprehensive bibliography (over 9,500 items) of Soviet astronomical publications from 1917 to 1957. An author index lists some 1,800 astronomers with references to their contributions. The bibliographic part was compiled by N. B. Lavrova, N. D. Petrova, Ya. G. Perel', and T. A. Zalkind.

TABLE OF CONTENTS:

PART I. COLLECTION OF ARTICLES

Card 4/9

DEYCH, A.N.

Investigating the motion of the dark companion of 61 Cygni.
Part 3. Izv. GAO 22 no. 1:138-150 '60. (MIRA 13:12)
(Stars--Proper motion)

S/035/61/000/009/025/036
A001/A101

AUTHOR: Deych, A.N.

TITLE: Investigation of the motion of a non-luminous satellite of 61 Cygni

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 9, 1961, 41-42, abstract 9A322 ("Izv. Gl. astron. observ. v Pulkove", 1960, v. 22, no. 1, 138 - 150, Engl. summary)

TEXT: In the preceding works the author investigated the orbit of the non-luminous satellite of 61 Cyg using the measurements of separations between its components. In the present work the motion of each component of 61 Cyg was referred to fundamental stars in order to determine, which component belongs the satellite to. 162 plates of the Pulkovo normal astrograph for 1903-1908, 1930-1940, 1948-1951, and materials of the Sprool Observatory were made use of. Residual displacements Δx and Δy of components A and B are given for each year. All observations are broken down by periods 5.0; 4.9, and 4.8 years, and for each of these periods graphs are plotted which show displacements of components A and B and their differences. On the basis of these graphs the conclusion was drawn: the dark satellite belongs to component A, and 4.9 years is the fittest

Card 1/2

Investigation of the motion ...

value for the period. The visible ellipse of component A is constructed, and the elements of the orbit are determined by B.K. Mlodziyevskiy's method: A;a = = 0".014; e = 0.5; i = ± 46°, Ω = 94°; ω = 115°; T = 1953.2; P = 4.9. The mass of the dark satellite = 0.012 $\odot$. The greatest separation between component A and the dark satellite in apoastron is equal to 0".72. The next passage through the apoastron will take place in 1960. There are 6 references.

N. Bronnikova

[Abstracter's note: Complete translation]

V

Card 2/2

35244
S/035/62/000/002/009/052
A001/A101

3,5150

AUTHORS: Deych, A. N., Chudovicheva, O. N.

TITLE: A comparison of proper motions and magnitudes of stars in two special Kapteyn's areas according to measurements at Pulkovo and Groningen. Determination of light absorption by dark nebulosities in these areas

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 2, 1962, 36, abstract 2A324 ("Izv. Gl. astron. observ. v Pulkove", 1961, v. 22, no. 1, 65-78, English summary)

TEXT: The proper motions and photographic magnitudes of 549 and 479 stars respectively in Kapteyn's areas 9 and 24 are compared on the basis of the papers: Deych, A. N., Lavdovskiy, V. V. "Izv. Gl. astron. observ. v Pulkove", 1948, no. 141; Deych, A. N. "Izv. Gl. astron. observ. v Pulkove", 1948, no. 141; Hiemstra, B. "Publ. Kapteyn Astron. Labor.", 1938, v. 48). The summary catalogue is presented. The probable error of one proper motion is equal to $\pm$ 0".0033. To determine light absorption, all the stars in the light and dark fields of both areas were divided into groups, with 20 stars in each, in the order of increasing their

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S/035/62/000/002/009/052
A001/A101

A comparison of proper motions ...

visible magnitudes. Mean group proper motions μ and magnitudes m were obtained with taking into account systematic and random errors. A method of estimating light absorption by a dark nebula is proposed, which is based on the known relation between tangential velocity, proper motion and distance of the star. Space velocities of stars of various spectral classes are given, as well as percentage of these classes. The ratios of distances of stars of the same visible magnitudes in the light and dark fields indicates the existence of light absorption by clouds of the order of $0^m.5$. To this, $0^m.2$ more should be added on account of a change of luminosity function while passing to actually brighter stars weakened by absorption. The total light absorption by dark clouds in both areas turns out to be equal to $0^m.7$. This agrees well with estimates determined by Wolf's graphical method. There are 10 references.

Authors' summary

[Abstracter's note: Complete translation]

Card 2/2

DEYCH, A. N.

Double and multiple stars in 115 Kapteyn areas found from their common proper motions. Izv.GAO 22 no.3:79-97 '61. (MIRA 14:11)

(STARS)

AGEKYAN, T.A.; VORONTSOV-VEL'YAMINOV, B.A.; GORBATSKIY, V.G.; DEYCH, A.N.; KRAT, V.A.; MEL'NIKOV, O.A.; SOBOLEV, V.V.; MIKHAYLOV, A.A., otv. red.; KULIKOV, G.S., red.; AKSEL'ROD, I.Sh., tekhn. red.

[Course on astrophysics and stellar astronomy]Kurs astrofiziki i zvezdnoi astronomii. 2. izd. Moskva, Fizmatgiz. Vol.2. [By]T.A. Agekian i dr. 1962. 688 p. (MIRA 16:1)
(Astrophysics) (Stars) (Nebulae)

DEYCH, A.N.

Investigation of double and multiple stars in 115 Kapteyn areas. Izv. GAO 23 no.1:151-158 '62. (MIRA 16:12)

SELESHNIKOV, Semen Isakovich; DEYCH, A.N., doktor fiz.-mat. nauk, nauchn. red.; GRIBAKIN, D.V., red.

[The ABC's of the starry sky] Azbuka zvezdnogo neba. Leningrad, Obshchestvo "Znanie" RSFSR, 1963. 62 p. (MIRA 17:6)

DEYCH, A.N.

New intergalactic globular cluster? Astron. tsir. no. 259: 1-2 S '63. (MIRA 17:5)

1. Glavnaya astronomicheskaya observatoriya AN SSSR, Pulkovo.

L 02338-67 EWT(1) GW

ACC NR: AR6028396 SOURCE CODE: UR/0269/66/000/005/0019/0019

21
B

AUTHOR: Deych, A. N.

TITLE: Photographic determinations of the positions of large planets 12

SOURCE: Ref. zh. Astronomiya, Abs. 5.51.149

REF SOURCE: Tr. 16-y Astrometr. konferentsii SSSR, 1963. M.-L., Nauka, 1965, 65-70

TOPIC TAGS: planetary photography, large planet, photographic planetary observation, planetary brightness

ABSTRACT: A survey has been presented of photographic determinations of the positions of large planets (except Mercury) made at various observatories in the Soviet Union. Lense astrographs with focal lengths of 2—4 m are usually used for photography; the technique of photographic observation of large planets depends on the objects of observations themselves. In order to obtain a clear picture of Pluto, a long exposure time is required, which causes an overexposure of the images of the reference stars; in order to avoid errors in "brightness leveling", to photograph Pluto it is necessary to use a diffraction grating in front of the lense giving diffrac-

Card 1/2 UDC: 522.61:523.4

L 02338-67

ACC NR: AR6028396

tion satellites by the images of the stars reduced by 5^m. The apparent magnitudes of Uranus and Neptune correspond to the magnitudes of the reference stars, so that the diffraction grating is not necessary; the exposure time is shortened to 3-4 minutes. Photographic observations of Jupiter and Saturn require reducing the brightness of the images by a neutral filter or a desensibilization of the emulsion at the point where the planet image should be. Observation of Mars and Venus is of greatest interest (due to the development of astronautics), but the most difficult, since in addition to a high brightness, they have a marked motion relative to the stars. Several methods are described for calculating or excluding the effects of all these factors. Original article has 13 reference items. N. Shakht. [Translation of abstract].

SUB CODE: 03/

Card 2/2

S/026/63/000/001/004/007
A004/A126

AUTHOR: Deych, A. N., Professor

TITLE: Binary and multiple stars

PERIODICAL: Priroda, no. 1, 1963, 61 - 67

TEXT: The author starts this article with reporting on the discovery of binary stellar systems and presents a survey on the detection of such multiple stars. In particular, he refers to the binary stars Castor in the Gemini constellation, Mizar and Alkor, etc., and points out that, in the course of time, it was discovered that binary and multiple stars are more or less the rule and not, as it was assumed formerly, the exception. Some methods of detecting binary or multiple stellar systems are described. The author then comments on invisible stellar satellites and on the accuracy of measuring binary stars and points out that, at present, some 40,000 binary and multiple stellar systems are known, in comparison with 2,600 that were listed by V. Struve in 1837. Concluding, the author mentions some of the hypotheses on the origin of multiple stars, a problem which belongs to one of the most difficult ones in astronomy and, in this

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S/026/63/000/001/004/007
A004/A126

Binary and multiple stars

connection, quotes the theories of O. Yu. Schmidt and V. A. Ambartsumyan. There are 7 figures.

ASSOCIATION: Glavnaya astronomicheskaya observatoriya AN SSSR (Main Astronomical Observatory of the Academy of Sciences USSR), Pulkovo

Card 2/2

VYAZANITSYN, V.P. [deceased]; GNEVYSHEV, M.N.; DOBROVOL'SKIY, O.V.; KRAT, V.A.; MARKOV, A.V.; MOLCHANOV, A.P.; SOBOLEV, V.M.; SHARONOV, V.V.; DEYCH, A.N., red.; MEL'NIKOV, O.A., red.; KULIKOV, G.S., red.

[Course of astrophysics and stellar astronomy] Kurs astrofiziki i zvezdnoi astronomii. Moskva, Izd-vo "Nauka." Vol.3. 1964. 375 p. (MIRA 17:5)

DEYCH, A.N.

The 26" (65 cm.) refracting telescope of the Pulkovo Observatory.
Izv. GAO 23 no.4:113-119 '64. (MIRA 17:9)

DEYCH, A.N.

Reduction of photographic positions at an arbitrary optical center. Astron.zhur. 42 no.5:1114-1116 S-O '65. (MIRA 18:10)

1. Glavnaya astronomicheskaya observatoriya AN SSSR.

DEYCH, A. YA.

DEYCH, A. YA. — "Using Refractometry to Study Compounds of a Higher Order in Salts and Other Systems." Belorussian State U imeni V. I. Lenin. Minsk, 1955. (Dissertation for the Degree of Candidate in Chemical Sciences)

SO: Knizhnaya Letopis', No 1, 1956, pp 102-122, 124

DEYCH, A.Ya.

Physicochemical analysis of the system $(CH_3COO)_2Pb$--CH_3COONa--CH_3COOH. Zhur. neorg. khim. 2 10:2436-23337 O '57. (MIRA 11:3)
(Systems (Chemistry)

Deych, A. Ya.

AUTHOR: Deych, A. Ya. (Riga) 76-10-25/34

TITLE: Investigation of Liquid Systems by the Deviation from Additivity of Their Viscosity Logarithms (Izucheniye zhidkikh sistem po otkloneniyu logarifma vyazkosti ot additivnosti).

PERIODICAL: Zhurnal Fizicheskoy Khimii, 1957, Vol. 31, Nr 10, pp. 2336-2339 (USSR)

ABSTRACT: Following systems were investigated by means of the physicol-chemical analysis according to the method of deviation from additivity of the viscosity logarithms: $C_6H_5NH_2$ - C_5H_5N, $ZnSO_4$ - $(NH_4)_2SO_4$-H_2O and BaJ_2 - NaJ - CH_3OH. It is shown that according to the deviation from additivity of the viscosity logarithms the chemical interaction and the character of the molecular compounds resulting in the liquid systems can be judged with security. The example of the $ZnSO_4$ - $(NH_4)_2SO_4$ - H_2O- system shows how to detect the possibility not only of the molecular compounds in the system but according to

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the deviation from additivity of the viscosity logarithms also the composition of the latter. In the investigated systems following molecular compounds were found:

$(NH_4)_2[Zn(SO_4)_2]$ and $C_6H_5NH_2 : C_5H_5N$,

which is confirmed by the references. The formation of the compound $Na[BaJ_3]$ in a system with methanol must be confirmed according to other methods of the physical chemical analysis. There are 3 figures, 2 tables, 7 Slavic references.

SUBMITTED: October 1, 1956

AVAILABLE: Library of Congress

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AUTHOR: Deych, A. Ya. 78-3-6-27/30

TITLE: Investigations of Complex-Formation in the $NiSO_4$-H_2SO_4-H_2O-Systems by Physico-Chemical Analysis (Izucheniye kompleksoobrazovaniya v sisteme $NiSO_4$-H_2SO_4-H_2O metodami fiziko-khimicheskogo analiza)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 6, pp. 1465-1467 (USSR)

ABSTRACT: The $NiSO_4$-H_2SO_4-H_2O-system was investigated at higher concentration of the initial components and at different temperature by different physico-chemical analytical methods, especially the density, viscosity and the microphotography of nickelsulfate-crystals.
It was found by the determination of the density that a compound with the molar ratio of the components 1 : 1 with a composition of $H_2[Ni(SO_4)_2]$ exists. Also the viscosity curves and the volume-change confirm the existence of this compound at 30°C.

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The microphotography of the nickelsulfate crystals also definitely confirms the presence of this chemical compound.
An increase in concentration in the initial solutions up to 1,7 g-mol/1 and a reduction of temperature to 10°C do not disturb the composition of the compound.
There are 3 figures and 4 references, 4 of which are Soviet.

SUBMITTED: October 17, 1957

AVAILABLE: Library of Congress

1. Chemical compounds--Analysis 2. Microphotography --Applications

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AUTHOR: Deych, A. Ya. SOV/78-3-8-27/48

TITLE: Investigation of the Ternary Systems BaJ_2-NaJ-CH_3OH and $CeCl_3$-NH_4Cl-CH_3OH by Means of the Physico-Chemical Analysis (Issledovaniye troynykh sistem BaJ_2-NaJ-CH_3OH i $CeCl_3$-NH_4Cl-CH_3OH metodami fiziko-khimicheskogo analiza)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol. 3, Nr 8, pp. 1888-1890 (USSR)

ABSTRACT: The nature of the solvents is of great importance in the complex formation in dissolved salts. Taking into account this fact the following systems were investigated: BaJ_2-NaJ-CH_3OH and $CeCl_3$-NH_4Cl-CH_3OH.

The former system was investigated by the following methods: Refractive index, density and viscosity.

The latter system was investigated by the deviation of the refractive index from the additivity.

In the system BaJ_2-NaJ-CH_3OH a molecular compound was found in

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which the ratio of components was 1 : 1. This compound has the following formula: $Na[BaJ_3]$.

In the system $CeCl_3$-NH_4Cl-CH_3OH such a molecular compound could not be found. The possibility of employing refractometry for investigating the molecular compounds and determining their composition, especially in salt mixtures with non-aqueous solvents, was demonstrated.

There are 2 figures, 2 tables, and 4 references, 4 of which are Soviet.

SUBMITTED: July 8, 1957

Card 2/2

AUTHOR: Deych, A. Ya.

SOV/78-3-10-31/35

TITLE: Investigation of Complex Formation in the Systems $MnCl_2$-LiCl-H_2O, $CoCl_2$-KCl-H_2O and $AlCl_3$-KCl-H_2O (Izucheniye kompleksoobrazovaniya v sistemakh $MnCl_2$-LiCl-H_2O, $CoCl_2$-KCl-H_2O i $AlCl_3$-KCl-H_2O)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 10, pp 2420-2421 (USSR)

ABSTRACT: The systems $MnCl_2$-LiCl-H_2O, $CoCl_2$-KCl-H_2O and $AlCl_3$-KCL-H_2O were investigated with respect to their refractive index, density and surface tension in order to determine the formation and the composition of the molecular compounds resulting from them. It follows from the deviation of the refractive index from additivity that molecular compounds form in all three systems when the molecular ratio of the components is 1:1. The molecular comounds have the following composition: $Li[MnCl_3]$, $K[CoCl_3]$, $K[AlCl_4]$. The existence of the above-mentioned molecular compounds in the systems was confirmed also by the determination of the surface tension. In these systems, chemical processes take place in the interaction. In the system $CoCl_2$-KCl-H_2O the deviation

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